

REPORT OF THE CIVIL AERONAUTICS BOARD
on the
Investigation of a Mid-Air Collision Between Two Aircraft
Engaged in Local Instruction Flights

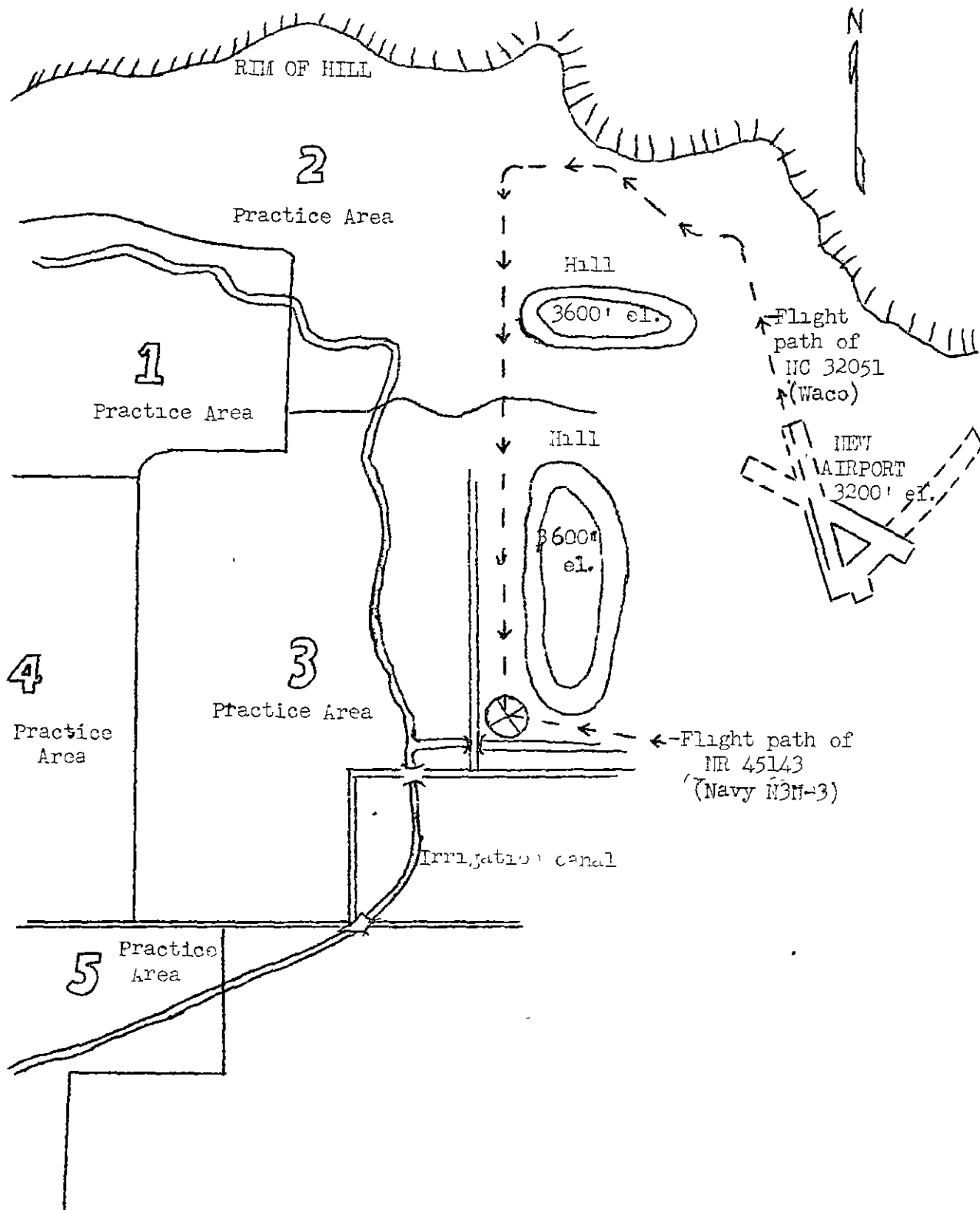
A mid-air collision which occurred approximately 3 miles southwest of Prineville Airport, Prineville, Oregon, about 9:05 a.m. on December 6, 1943, resulted in fatal injuries to Instructor Max Dwain Morrow and his student, Charles Daniel Donohue, flying a Navy N3N-3, and a solo student, Robert Erwin Furse, flying a Waco UPF-7. Morrow held a commercial pilot certificate with single-engine land, 0-330 h.p., and flight instructor ratings. He had flown approximately 2099 hours, 44 of which were in the type aircraft involved. Both Donohue and Furse held student pilot certificates and were enrolled in the secondary instructor course of the War Training Service program. The Navy N3N-3, NR 45143, owned by the U. S. Department of Commerce, and the Waco UPF-7, NC 32051, owned by the Defense Plant Corporation, were being operated by the Portland Flying Service. Both aircraft were demolished.

Instructor Morrow and Student Donohue took off from Prineville Airport about 8:44 a.m. for their assigned practice area, No. 3, southwest of the airport where they were to practice a series of low sequence maneuvers at an altitude of around 500 feet. Approximately eleven minutes later Student Furse took off from the same airport with instructions to proceed to practice area No. 5 and practice a sequence of high altitude maneuvers at and above 1500 feet. While Furse was flying south through area No. 3 to reach his assigned area, the Navy N3N, which was headed approximately west-northwest, collided with the Waco at an altitude of about 500 feet. (See sketch Page 2.) Both planes fell to the ground, out of control, 1250 feet apart.

Examination of the wreckage revealed no evidence of failure of any part of either aircraft prior to the collision. Marks on both planes indicated that the left wing "N" strut of the Navy N3N had struck and severed the upper left wing tip of the Waco, while its propeller tore off the Waco's left stabilizer and elevator.

Investigation disclosed that no local field rules had been published or displayed on the field office bulletin board at this operation, such information being transmitted verbally by instructors. According to the chief pilot, if Student Furse had followed customary procedure in reaching his practice area, he would have left the traffic pattern and climbed to 500 feet, proceeded straight ahead for one mile on the 45° leg, then climbed, making 90° turns alternately to the right and left, until an altitude of 1500 feet had been reached. He would then have proceeded directly to his assigned practice area. Pilot Furse complied with this procedure except for altitude. It could not be determined whether he was aware that he was supposed to climb to 1500 feet before proceeding to his assigned area, or was under the impression that he was to fly to his practice area at 500 feet and then climb to 1500 feet to practice maneuvers.

In all probability, the Navy N3N would have been difficult for Furse to see while he was heading south, as it was east of his plane and in a brilliant early morning sun. It appears likely also that the occupants of the Navy N3N were preoccupied with checking reference points on the ground and failed to see the Waco.



While the operator's laxity in not publishing, posting and rigidly enforcing field traffic rules was a definite contributing factor, the probable cause of this accident was lack of vigilance on the part of the occupants of both aircraft.

BY THE BOARD

/s/ Fred A. Toombs
Secretary